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ORIGINAL COMMUNICATIONS.

APPLICATION OF FORCEPS IN HEAD-LAST PRESENTATION.

BY EUGENE P. BERNARDY, M.D.

IS there more danger to the child in having the after-coming head delivered with the *forceps* or by *powerful traction* made upon the body of the child? Is it consistent with common sense that the slender and delicate neck of a child should be pulled and dragged on with such pertinacity? I am certain no child's neck was ever made for such purpose, and I certainly believe that there is almost in every case some damage done either to the mother or child, in some cases to both.

Prof. Meigs, in his excellent work on obstetrics, claims the forceps as the child's instrument; and truly is it in head-last presentation.

I am certain that by the application of the *forceps* on the after-coming head we give a better chance to the child for its life, with less danger of inflicting any injury on it or the mother.

I will cite some cases occurring in my practice, and the method of treatment adopted in each.

Case I.—Mrs. M. S., age 20, first child; was called to attend her on the evening of August 15, 1870. She had been in labor some twenty-four hours. On examination, I found the os perfectly dilated, and breech presenting. After waiting for two hours, I ruptured the bag of waters during a pain, which caused the breech to descend rapidly, and in a short time the breech and body were delivered without any trouble; but I was enabled to deliver the head only after using the greatest amount of traction. While making traction I distinctly heard something snap; in fact, the patient and the nurse heard it. I could not detect anything wrong immediately after birth; but the next day the mother called my attention to the child's neck, and on examination I found the fourth and fifth cervical vertebræ separated. It took nearly three weeks before the parts regained their normal condition.

Case II.—On the morning of August 17, 1871, I was requested by Dr. K. Gilbert to take charge of Mrs. E. H., age 20, then in labor with her first child. She had been in labor some ten hours. On making an examination, I found the os dilated, bag of waters ruptured, and in less than twenty minutes from the time I entered the room the breech and body of the child were delivered. Now came the tug of war: try my utmost, I could not disengage that head. I had sent for my forceps, but I could not remain idle until they arrived: I must do something, and that quickly. Wrapping the child's body in a towel, I braced myself against the side of the bed (the patient lying across the bed); I used my utmost strength, lifting the patient nearly a foot from the bed; the pump-handle method was tried: all at once something snapped, and in a few moments an asphyxiated child was born, which came to after an hour's hard work. On examination, separation of the third and fourth cervical vertebræ was distinctly detected. I followed up the child for nearly six months, when it gradually recovered from the injury, but I believe in the following summer died of congestion of the brain.

Case III.—Mrs. M. R., age 35, fifth labor; patient of Dr. Donnelly. The doctor being out of town, the case was sent to me by Dr. Wm. H. Hooper, on the morning of August 26, 1872. The patient had been in labor during the preceding day. On examination, I found the waters ruptured, os fully dilated, and the breech pressing on the perineum. In about a half an hour's time the body of the child was delivered. The head still remained, and after using some powerful traction I succeeded in delivering the patient of a living male child. In this case I could not detect any injury to the child.

Case IV.—Mrs. M., age 30, fifth confinement; was called to attend her on the evening of December 14, 1872. On examination, I found the os perfectly dilated, vertex presentation, right occipito-anterior position, contraction of the antero-posterior diameter to from two and three-quarters to three inches, with bony tumor on right side of pelvis.

The history of the case was bad; craniotomy three times; her fourth child, premature (seven months), was delivered living, by Dr. Hooper, with the long forceps.

Recognizing the difficulty, and believing it to be a case requiring craniotomy, Dr. Hooper was called in consultation. We attempted to deliver with the long forceps, but unsuccessfully. Having determined to perform craniotomy, the instruments were sent for. While the messenger was away, in consultation, we decided to deliver by version, and, if we could not then deliver, to perforate the head posteriorly.

Version was commenced by Dr. Hooper, and completed by myself. The body of the child was readily delivered, but there remained the head. We each took our turn in making traction of the most powerful kind, but we were rewarded only by the cracking and snapping of the bones of the neck; we then applied the forceps (Wallace), tying the handles together, and, after the most prolonged and

powerful traction, delivered the unfortunate patient of a dead child.

On examination of the child, all the cervical vertebræ were found to be dislocated, and I really believe had we not applied the forceps, but continued our traction, the body would have been severed from the head.

Case V.—Mrs. R., age 28, second child; had been in labor some eight hours when I arrived at her bedside (February 16, 1874). On examination, I found a left posterior face presentation. The os being dilated, I decided to perform version by the bimanual method, which was done very easily. After getting the breech to present fully at the superior strait, I ruptured the bag of waters during a pain, which caused the breech to enter the cavity of the pelvis, and in the course of an hour the body of the child was born.

In this case I decided not to use such powerful traction as I had been in the habit of doing, but to apply the forceps at once: this being done, I was able in a very short time to deliver the patient of a living child, without any injury to either.

Case VI.—On the evening of September 13, 1874, I was called to attend Mrs. T., age 40, in her eighth confinement. Her parturient history was forceps in all but one case. When I arrived at her bedside she had been nearly two days in labor, believing, as she herself stated, that she would cheat the doctor and have her child without any trouble. On examination, I found the os dilating, bag of waters unruptured, and breech presenting. Labor was tedious. After waiting for four hours I ruptured the bag of waters; the breech slowly descended, and finally towards morning the body of the child was delivered.

I made just enough traction to slightly put the neck on the stretch; this was done by throwing well over the mother's abdomen the body of the child; the forceps were applied, and in five minutes' time the patient was delivered of a living child, both mother and child uninjured.

Case VII.—Mrs. S., age 35, third child; all her previous labors were trunk presentation; version performed, and dead children delivered.

When called to attend her (October 9, 1875), she had been in labor a few hours. On examination, I found an antero-posterior contraction of about three and a half inches, os dilating, waters intact, and footling presentation. Seeing I was not wanted, I left, with orders to be sent for at once if the pains increased. Towards 6 A.M., a messenger came for me, and in a short time I was at her bedside. I found her in good pains, and learned that the waters had ruptured during the night.

On examination, I found the os perfectly dilated, waters ruptured, and left foot in the vagina: making slight traction on this foot, I made the breech engage at once, and in the course of an hour the body was delivered. Bringing the patient across the bed, I now made powerful traction; the pump-handle method was tried, but without success. I then applied the forceps (Wallace), and in a short time delivered the woman of a dead child.

As good fortune would have it, I was again called to attend Mrs. S. (January 2, 1877) in labor. On my arrival I found she had been in labor a good part of the day before, and that on the increase of the pains I was sent for (January 2, 1877, at 5.30 A.M.). On examination, I found the os perfectly dilated, bag of waters intact and at each pain pressing in the vagina. I could not detect any presenting part, but towards the right posterior portion of the bag of waters I thought I felt the funis. I ruptured the bag of waters during a pain, and down came the cord,—a complete prolapsus of the cord. On pushing my examination further, I found an anterior trunk presentation.

Here were complications,—complications that gave me serious doubts of being able to deliver a living child. My first effort was to reduce the cord; which I effected by placing as much as I could of the cord in the palm of my hand, and carrying it up to the fundus of the uterus: leaving it there, I quickly passed my hand downward and seized a foot (left, as I afterwards ascertained), made sufficient traction to make the breech engage, and I found, to my great pleasure, that the cord remained reduced. The pains being good, the body of the child was soon delivered; the arms being up side of the head were brought down after some trouble. I now decided to use no traction, but to apply the forceps and deliver at once. Making the nurse hold the child upward and out of my way, I applied the forceps (Simpson), and delivered the woman of a living child.

Case VIII.—Mrs. R. H., age 22, second child; first child delivered by the forceps dead. I was sent for in a great hurry on the afternoon of October 14, 1875, with the statement that the child was half born. On my arrival I found all but the head of the child delivered. The body was perfectly black. Throwing the body of the child well over the mother's abdomen, and having it retained there by one of the women present, I applied Simpson's forceps, and delivered the patient of a partially asphyxiated male child, which was soon brought to by smart spanking.

According to the statement of the women present, the child's body had been born a half an hour before I arrived. How far this is true it is impossible to say.

Case IX.—Mrs. K., age 39, fifth confinement; in her previous confinements had been delivered by forceps. I was called to attend her on the evening of October 5, 1876. She had been in labor all day. On making a vaginal examination, I found the os perfectly dilated, bag of waters intact, and a left posterior face presentation. There was slight contraction of the anterior diameter.

The family, after being made acquainted with the condition of things and what was to be done, demanded a consultation, which I readily granted, and the family physician, Dr. Hooper, was sent for.

On his arrival, we decided to perform version. The patient was etherized and brought well to the edge of the bed. I then performed version easily, it not taking me ten minutes to perform it. After the body and arms were delivered, the forceps were applied (Wallace), and in a very short space of time I delivered the patient of a living child. Mother and child uninjured.

Case X.—Mrs. B., age 27, first child; was requested by Dr. Hooper to see her with him. She had been in labor seventy-two hours. Breech presentation. After examination, it was decided to bring down the breech with the blunt-hook, by applying it in the groin and making traction. This was done, and the body readily delivered.

Now came the trouble: the head would not come, in spite of the most powerful traction used. We at last decided to apply the forceps, which being done, the patient was delivered, in about ten minutes, of a dead child.

There was found, on examination, fracture of the spine, both in the cervical and dorsal regions.

Case XI.—Mrs. T., age 30, fifth child; always had abnormal presentations. Was sent for to attend her May 4, 1876. She had been in labor for some twenty-four hours. On making an examination, found the os dilated, waters ruptured, both arms in the vagina, trunk presentation.

Having etherized the patient, I readily performed version. The body was easily delivered, but the head remained undelivered. Throwing my full strength upon the body, I made powerful traction, while the nurse pressed well down over the pubis, but without success. I then applied the forceps (Wallace), and in a short time delivered the patient of a dead child.

In looking over the above cases it will be seen that three cases were delivered by traction, four cases delivered by traction and forceps, and five cases delivered by forceps *alone*. In all the cases where the forceps were applied at once *the children were born alive and uninjured.*

In Case VII. the patient was delivered twice, once by traction and forceps, which gave a dead child; the second time, where the complications were of the most serious character, and where the chances for the child were greatly diminished, by the timely application of the forceps I was able to deliver a living child.

Where traction was resorted to before the application of the forceps, all died. Out of three cases delivered by traction alone, only *one* was uninjured.

The above record shows most decidedly in favor of the early application of *forceps*, for we have here twelve cases in all,—five cases delivered by the forceps alive and uninjured, while of the other seven cases we have the history of only one case uninjured. I may here state that in nearly all the cases supra-pubic pressure was employed in conjunction with traction.

I cannot be convinced that it is safe to apply on the body the amount of traction as stated by some writers. I know of two authentic cases where by the use of powerful traction detruncation of the fœtus occurred. There is no necessity for these sad consequences, for with the forceps we have the head entirely at our command, and the force is applied directly on the strong head of the child.

Another pernicious rule which some writers recommend, is to introduce one or two fingers in the child's mouth and make traction. I most decidedly condemn such practice, for I am certain that no child's inferior maxillary could stand such traction without being dislocated or fractured.

Some of the points in favor of the forceps are:

1. In a deformed pelvis or an abnormally large head, by the application of the forceps we can reduce the volume of the child's head without injuring it, rendering it as much as possible in accordance with the conformation of the pelvis, and also reducing the ratio of injury to the mother; injuries which must occur where powerful traction is made.

2. In breech, especially in artificial breech or breech made by version, there is more or less extension of the head, which the forceps can readily correct, and which if traction is used can only be corrected by the most powerful effort.

3. By the application of the forceps on the after-coming head we have complete control of it, and can easily correct any malposition, and place the head in the most favorable position for delivery, with the least amount of risk to mother and child.

I do not wish it to be understood that I advocate the application of forceps in every case of head-last presentation, but I most decidedly recommend and give preference to the forceps in cases where powerful traction is demanded.

In the application of the forceps on the

after-coming head, we have not, as some believe, insurmountable difficulties to overcome. The body of the child does not interfere materially; the child's body with its arms is given in charge of an assistant or nurse; the back of the child is brought well over the mother's abdomen, in anterior positions (patient lying on her back); while in posterior positions the back of the child is brought well towards the mother's back (the patient lying on her left side); this will place the child's body almost entirely out of the way, and we have only to apply the same rules here that govern us in the application of the forceps in head-first presentations.

In head-last presentations we must bear in mind that a life trembles in the balance. A few minutes at the most will decide the child's fate: therefore, why hesitate? If it is found that slight traction cannot bring the head, apply the forceps at once, and deliver.

221 South Seventeenth Street.

JABORANDI IN BRIGHT'S DISEASE.

BY EDWARD T. BRUEN, M.D.,

Physician to the Philadelphia Hospital.

I AM not one of those who would base conclusions in therapeutics from the observation of a few clinical cases; but, as experience in administration of drugs is of extreme service in estimating their value, I wish to place on record the following notes based upon instances in which I have prescribed jaborandi during six months of service in the medical wards of the Philadelphia Hospital.

Case I.—Catherine B., æt. 30, married, the mother of five children, August 24, 1876, was admitted into my ward. Her occupation as waiter in an eating-stand in a market was attended with constant exposure to damp and cold, but she always enjoyed health, save an occasional attack of rheumatism. It would appear from her narrative that two years ago she took a "general cold;" and her disease probably dates from this period. She soon after experienced a good deal of dyspnœa on exertion, with palpitation of the heart, and her feet and legs became œdematous. In all this time she was only confined to bed once, when she says she was much troubled with dropsy, but she recovered after brief treatment.

When I saw her, she had intense general anasarca; face, arms, and legs were enormously distended. She passed scanty amounts of urine, from six to eight ounces in the twenty-four hours. It was highly albuminous, and subsequent microscopic examination revealed casts of entire tubules filled with epithelial cells, also granular and small epithelial casts. Subsequently, in December, I found large hyaline with fewer epithelial casts. There was intense dyspnœa from œdema of the lungs, with bad headache; the action of the heart was very feeble; the pulse could scarcely be detected, but was estimated to be about 140. There were pleural adhesions over right side, and some effusion into both pleural cavities. She was ordered jaborandi ʒij to be made into infusion with aquæ ʒij, the entire amount to be taken in one or two hours. She was to be wrapped in blankets, seated in a rocking-chair, as dyspnœa prevented a recumbent posture. In less than one hour after taking the tea she perspired profusely, the dyspnœa and headache were relieved, and the general condition of the patient was much improved. There was no depression whatever, nor any nausea, which is said to occur frequently. I have never witnessed any unpleasant result after its use, and in only one case did I notice the salivation which Dr. Fothergill in his late work on Therapeutics reports as constant in some cases observed for him in an English hospital, much the same dose being employed.

August 25.—She says she has passed more urine than since her attack commenced. The same treatment was repeated, jaborandi ʒi being employed. It would be tedious to detail the daily notes of her condition. Let it suffice to say that the administration of the drug was continued every other day for a week, every third day for a week longer, the result being equally satisfactory. On the third day she was able to lie down in bed, and a marked improvement in her general condition was noted. The only other drug used was infusion of digitalis, administered in doses of ʒss. every three hours for one week, until the pulse was reduced to 100, below which it could not be brought, as unpleasant symptoms resulted if digitalis was given after this effect was obtained. The very great relief afforded very soon after each dose of jaborandi is the point I wish to call attention to; though digitalis was most valuable as an auxiliary.

In the middle of September she left the house, but, meeting with neglect, her symptoms returned with all their former severity, and she was again admitted to the hospital. She was relieved by the same treatment of the severe symptoms in a shorter period, and she was subsequently kept upon iron and a tonic treatment, with occasional doses of jaborandi whenever the dropsy was troublesome.

The anasarca was never completely subdued, and from time to time she suffered much from dyspnœa. I have used in these cases with much benefit, markedly so in her case, the following prescription:

℞ Ammon. brom., gr. xlviii;
Ammon. carb., gr. xxiv;
Aq. camphoræ,
Mucilag., āā q. s. ʒiij.—M.

Tablespoonful well diluted, four or five times daily.

Sometimes I could omit the carbonate of ammonium; but it seemed to benefit the circulation by its stimulating effects.

From time to time she suffered exacerbations of her disease; but for six months these have been palliated by the means I have detailed.

Case II.—Henry P., æt. 18, admitted September 4, 1876, I bring before your readers because he presents a most unique example of localized œdema in Bright's disease. He is a dwarf.

His urine was highly albuminous, scanty, epithelial and granular casts abundant, with a history of dropsy and other symptoms which made the diagnosis easy. The tumor itself, located in the cervical region, was elastic, shiny, and pitted upon pressure. It had appeared a year before, with only slight general anasarca, and had disappeared under treatment in the Episcopal Hospital.

℞ Jaborandi, ʒii;
Aquæ, ʒiii.—M.

was ordered as before, to be repeated the second day. Milk diet, and the preparation of iron in the well-known Basham's mixture.

At the end of a week there was no evidence from inspection that a tumor had ever existed: he sweated profusely after every dose of the drug, and expressed himself as feeling much more comfortable. At present date the tumor has never returned.

Case III.—Robert F., æt. 50, admitted October 9, 1876. In this man's case the dyspnœa from intense œdema of the lungs was as severe as I have ever seen it. There was some general anasarca, and the patient was nearly comatose. He took jaborandi, administered as in the previous cases, for three weeks every other day, with the carbonate of ammonium for about one week, as in prescription given. He sweated profusely after every dose; at the end of the time stated he was completely convalescent. He, as did most of the others, used to beg for his medicine, for he recognized the great benefit he derived from it.

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In the following cases I also used jaborandi to relieve the suffering caused by dropsy when uræmia appeared inevitably about to come on, and recurred to its use whenever the symptoms appeared.

I give their names and dates of admission to show the length of time during which I had them under observation, and to demonstrate that the effect was more than temporary.

William Locker, æt. 40, admitted December 2, 1876. Not discharged.

James Dillon, admitted August 9, 1876. Discharged October 12, 1876.

Edward McFaut, admitted December 19, 1876. Discharged February 15, 1877.

James Williams, admitted December 12, 1876. Not discharged.

I know of no other agent which will afford so great relief as this drug. The use of steam baths cannot be substituted in its place, though these are valuable in a few cases where jaborandi is, for some reason, inactive; but some of my cases were relieved by the drug after steam baths had totally failed.

There is very little depression of the system from its use. In one instance a nurse gave a dose of it to a man suffering in the second stage of pneumonia with some symptoms of typhoid state: here there was considerable depression, but the free exhibition of stimulants in twenty-four hours relieved all bad effects. In one case of phthisis a profound sialagogue effect was produced: the patient said, "The water seemed to leak into my mouth like a fountain:" she filled several receptacles during the night, but all inconvenience passed away during the day. After using jaborandi, my patients were placed, as I have stated, on milk diet, principally, and Basham's mixture.

I write in hope of inducing the profession to make use of the drug in private practice; for, after some years' experience in this house in the treatment of Bright's disease, I can truly say I have never had so favorable results from any other drug or plan of treatment in the management of the serious and protean symptoms of this grave disorder.

March 8, 1877.

It is affirmed by the *Pharmacist* of Chicago that the trial is to be made of heating the city of Lockport by steam conveyed in iron pipes covered with asbestos and enclosed in wooden tubes.

RESULTS OF AN ANALYSIS OF THE ROOT OF GILLENIA STIPULACEA.

BY H. M. WETHERILL, JR., M.D., Ph.G.

From an Inaugural Essay.

THE genus Gillenia comprises two species,—G. trifoliata and G. stipulacea. To find the relative proportion of active matter in the roots of each variety, the author takes of the clean dry root of G. trifol. 600 grs.: of this, 481 grs. was cortex, 110 grs. was woody fibre. Loss, 9 grs. G. stip., 600 grs.: of this, 503 grs. was cortex, 91 grs. was woody fibre. Loss, 6 grs.

G. stipulacea is thus shown to be relatively the more active of the two.

Vegetable albumen was precipitated from the cold infusion of the root by tannic acid, heat, mercuric chloride, and creasote.

Upon the addition of tinct. iodinii to the filtered hot decoction, the characteristic blue color was struck, indicating starch. Tinct. ferri chlor. precipitated the blue-black gallo-tannate of iron not dissipated by heat.

By the addition of a solution of gelatin, a dirty-white precipitate of tannate of gelatin was produced.

Trommer's test indicates a small amount of sugar.

A pale scanty precipitate of arabin or gum was produced by the addition of alcohol to the cold infusion; a similar result upon the addition of basic lead acetate; but none with the neutral acetate. Resin falls upon the addition of water to the alcoholic tincture. By displacement with chloroform and subsequent evaporation, a green wax is obtained which is insoluble in water either hot or cold, benzine, or alcohol; very soluble in chloroform. Ether separates from it chlorophyll, which Pelletier finds to consist of wax and a green fixed oil. The same portion of the drug which was exhausted by chloroform was next displaced by water, to remove coloring-matter, tannic acid, etc. It was displaced by ether, which yielded upon evaporation a small amount of fixed oil and fatty matter. The fixed oil united with potassa and separated from this combination upon the addition of a dilute mineral acid. The presence of ethereal oil in this substance was obviated by carefully re-distilling the ether to be used.

The addition of strong alcohol to the hot decoction causes a slight precipitate of a dirty-white color. This may be vegetable casein.

By careful distillation of the root with water, in the presence of potassa, a few drops of a volatile oil separated. These are pale-yellowish, and have to a powerful degree the peculiar odor of the plant. This oil does not fulminate with iodine. Some plants of the natural odor Rosaceæ, of which Gillenia is a member, contain propylamia. No odor of fish-pickle was observed in the distillate: hence it probably contains none of the alkali.

A volatile red coloring-matter fills the receiver when the drug is distilled with water.

A portion of the root was displaced with strong alcohol. The resulting tincture was distilled to the consistence of an extract. This was treated with water to remove tannic acid, coloring-matter, etc. The residue was allowed to macerate fourteen days in water acidulated with sulphuric acid, and magnesia was added to saturation. This was next evaporated to dryness, and the resinous mass was treated with alcohol, filtered, and the alcoholic solution allowed to evaporate spontaneously. The result was an amorphous powder, yellowish white, slightly odorous, extremely bitter, unalterable in the air, not astringent, and soluble in water, ether, dilute acids, and alcohol. It cannot be crystallized from any of its menstrua; is non-volatile, and neutral to test-paper.

Sulphuric acid turns it first brown, then black. It strikes a blood-red color with nitric acid, and a green with chromic acid, and remains unchanged when treated with tannic acid; but plumbic acetate, potassa, and tartar emetic throw down white precipitates from its watery solution.

This substance is *gillenin*, the emetic principle of the plant.

The ashes of the root was boiled in water, filtered, and concentrated. This solution gave an alkaline reaction. Oxalic acid precipitated calcium oxalate. Tartaric acid and platinic chloride yielded evidence of the presence of potassium. Neither tannic acid nor potassium ferrocyanide gave any indication of the presence of iron.

A slight opalescence occurred upon the addition of stronger solution of ammonia to the solution of the ashes. This was not soluble in excess of ammonia, but was dis-

pelled upon the addition of a solution of ammonium chloride. Potassium carbonate produces a similar opalescence. Probably a small amount of magnesium is present.

The emetic dose of the root is thirty grains, repeated every fifteen minutes until emesis is produced. It acts with great certainty.

Gillenin, when pure, will produce nausea and vomiting in doses of from one-half to one grain.

Upon injecting a solution of gillenin into the femoral vein of a dog, its physiological action was manifested rapidly. Neither the powdered root nor the active principle has any unpleasant effect upon the respiratory tract, such as has C. ipecacuanha.

A CONVENIENT MODE OF DISPENSING OINTMENTS.

BY ARTHUR VAN HARLINGEN, M.D.,
Chief of the Skin Clinic, University Hospital.

I DESIRE to call attention to a mode of dispensing ointments which I believe to possess certain advantages over that ordinarily in use. In this city ointments are usually put up by the pharmacist in flat boxes of wood, porcelain, or glass, or in some cases in earthenware crocks, or in gallipots. The objection to this method of dispensing such preparations is that a large surface is necessarily exposed to the air, and decomposition quickly sets in, resulting in rancidity. Thus, an ointment intended to be applied to an inflamed surface, where the most soothing qualities are required, becomes rancid in a few days, the skin is irritated, and an effect quite opposite to that intended is the result. It is, I think, often the case that in this way many valuable unguents fall into undeserved disrepute. When kept in a cool place, most ointments, even when put up in the customary manner, will preserve their freshness for a considerable period. There are some, however, and notably the ung. diachyli of Hebra, perhaps the most valuable application of its kind in use, which decompose with great facility, and which in a few days become utterly changed as regards their therapeutic effect, unless preserved with the most scrupulous care. The ung. diachyli has long been a favorite application with me, and yet I have been until recently almost unable to employ it excepting in cases where the prescription could be frequently renewed and freshly made up each time, on account of the quality of rapid decomposition just mentioned.

I have of late, however, been enabled to prescribe this, as well as other easily decomposable ointments and those containing volatile substances, with perfect confidence, by employing a receptacle which will absolutely exclude the air at all times and yet allow free egress to the ointment when required.

The receptable to which I allude is a soft metal tube, such as is used by painters for containing moist colors. This can be supplied of any convenient size. It is cylindrical in shape, open at one end and closed at the other by a top of stiffer metal, having a neck like that of a bottle around which a thread has been cut: over this fits a cap, which can be screwed down so as to exclude the air perfectly. It is even fitted with a little bit of cork at the top, like the lid of a traveller's inkstand. The ointment in a melted condition is poured in at the open end of the tube, and, when filled, this end is pinched together and folded over, the soft metal permitting it to be perfectly sealed by this means. When needed for use, the cap is unscrewed, and by rolling up the flattened end of the tube a sufficient quantity of ointment may be forced out in the form of a plug, taken off with the finger, and applied as required. The operation completed, the cap is once more screwed on, and the ointment laid aside in its air-tight case until again needed. Where the ointment cannot be melted, it may be placed in the tube with the aid of a spatula.

I am indebted to an article in the *Medical Times* of May 30, 1874, for the suggestion of this plan for dispensing ointments, where it is credited to M. Jacques de May, a Parisian apothecary. Tubes of the kind described are to be found in the shops, containing rose-ointment and shaving-paste, but empty tubes of a convenient size have not until lately been attainable. Recently, however, Mr. Joseph P. Remington, the well-known pharmacist, of this city, has procured them for me, and now keeps them on hand, of various capacity, from two drachms upward; and I have employed them largely in dispensary and private practice with great satisfaction.

NOTES OF HOSPITAL PRACTICE.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF PROF. LOUIS A. DUHRING.

Reported by Dr. ARTHUR VAN HARLINGEN.

TINEA VERSICOLOR.

THE patient, a man 35 years of age, presents a diffused, fawn-colored eruption, extending from the neck to the groins, and over the upper portion of the arms. It is made up of ill-defined macular patches of a furfuraceous deposit, varying in area from split-pea to large coin size. At many points these smaller lesions coalesce to form larger, more or less irregular patches. On passing the hand over the surface scarcely any difference in sensation can be noted between the sound and diseased skin, which is elevated very slightly or not at all above the surrounding surface. He states the disease to be of three years' standing; it began in the form of a small patch on the chest and gradually spread, new patches appearing from time to time, until it attained its present extent. The eruption gives rise to considerable itching, which is more annoying at night than during the day.

Few diseases of the skin of common occurrence go more frequently unrecognized than tinea versicolor. Cases often go on for years, undiagnosed and untreated. Inasmuch as the affection resembles several others, it should be examined with care, and in full daylight, since by night the eruption may often be passed over unseen. Vitiligo, due to an atrophy of the pigment of the skin in the form of patches, often resembles tinea versicolor, but the latter is furfuraceous, while vitiligo is unaccompanied by scaling. The patch of vitiligo is white; there is less pigment than normal in the patch; while the surrounding skin is more deeply pigmented than usual. Any one examining a case of vitiligo with care is not likely to mistake it for tinea versicolor. Tinea versicolor is sometimes mistaken for syphilis, but it is difficult to imagine how this error can be made, as the disease in question really resembles none of the syphilodermata except the erythematous in its declining stage, and the so-called pigmentary, which latter is so very rare as not to be at all likely to be met with. Tinea versicolor in those few cases where it attacks the neck resembles chloasma, but it so unfrequently affects this portion of the skin, while chloasma is so rarely found elsewhere than on the face and neck, that the diseases are not likely to be confounded.

The cause of tinea versicolor is a vegetable parasite, the microsporon furfur, discovered in 1846 by Eichstedt, a Swede. There will be no difficulty in making a diagnosis of the disease if we examine some of these furfuraceous scales under the microscope. All the vegetable parasitic diseases, including tinea favosa, tinea circinata, and tinea versicolor, are contagious. Some, however, are more so, some less. Tinea versicolor is the least contagious. Cases may be freely handled without fear, though occasionally a husband and wife contract it from constantly sleeping with each other.

The treatment of tinea versicolor is generally simple. Occasionally, however, the disease proves obstinate. It need hardly be said that in the vast majority of cases external treatment alone is required. When, however, the disease is very rebellious and returns again and again after removal by appropriate applications, which is rare, arsenic and other general tonics may be prescribed. This will not be necessary in the case of one patient out of a number. Where we are able to succeed with local remedies alone, let us avoid internal treatment. In mild cases carbonate of sodium in baths, lotions, or ointment (in the proportion of a drachm to the ounce of lotion or ointment) will at times prove all that is required to effect a cure. A far better remedy, however, is the sulphite of sodium, applied in the form of a lotion, or as an ointment, as in the following:

℞ Sodii sulphit., ℥i;
Aquæ, f℥viii.—M.

This should be sopped on the skin wherever the disease exists, morning and evening, for a week or longer.

TELANGIECTASIS.

The patient, a man 55 years of age, presents an affection, scattered over the trunk, consisting of a number, certainly several dozen, of bright-red circumscribed more or less elevated lesions, varying from pin-head to pea size. They are quite smooth, and are seen on close examination to be composed of little knots and bundles of enlarged blood-vessels, in some cases flat, in others elevated above the skin. They give no sensation of pain, itching,

or uneasiness. According to the patient's account, they appeared suddenly, in the course of a night (and upon this point the patient is quite positive), about three weeks ago, a number of them coming out simultaneously and the others following more slowly, from time to time up to the present.

The affection, Dr. Duhring remarked, belongs to the class of vascular new growths, under which head are included *nævus vasculosus* and *telangiectasis*. The distinction between the two affections lies in the fact that the first is congenital and that the second is acquired. It is not usual for these growths to appear in such numbers as in the present case. Ordinarily, only one, two, or three make their appearance, and, as they are unaccompanied by any inconvenience, persons do not usually seek medical advice unless they happen to be situated upon the face, where they cause disfigurement.

The affection consists of a multiplication and increase in volume of the cutaneous blood-vessels over circumscribed, limited areas. If the statement of the patient be true, that some of the lesions appeared suddenly in the course of a night, more or less hemorrhage must also have occurred, which fact it is difficult now to determine.

The cause of telangiectasis is not understood. The growths usually increase from year to year in size, but very slowly, or they may remain unchanged. There is nothing malignant about them, they are benign in their nature, and it is only necessary to employ treatment when they give rise to disfigurement.

The diagnosis is not difficult: it must be distinguished especially from purpura simplex. At the distance of a few feet it would in the present case, where the lesions occur on the trunk, be almost impossible to distinguish the two diseases, so closely do they resemble each other in appearance. Close examination, however, will show the little blood-vessels ramifying throughout the patches. In purpura we have simply a hemorrhage into the skin, and no dilatation of vessels. Moreover, in a few days a change takes place, the purpuric spots become darker, change color, and disappear in the course of three or four weeks, leaving only stains behind. In the disease before us, however, no such change takes place. The little growths will in all probability remain the rest of the patient's life.

The treatment of these lesions is simple and easy, and the physician is often called upon to prescribe for them. The remedies employed are entirely local, and consist of the use of caustics, as a solution of caustic potash, in the strength of from one to four drachms to the ounce of water. The stronger solutions are to be used only where growths are small, pin-head sized. If they have attained the size of a split pea or larger, weaker solutions should be employed. The fluid may be applied by means of a small piece of wood or a match, care being taken that there shall not be a surplus, which might run over the adjacent healthy tissues. When the growth is somewhat extensive a small portion only should be cauterized at any one sitting. It may happen that no perceptible change will take place for a week or longer, but sooner or later the caustic will have its effect, though one, two, or more repetitions may be necessary to effect a cure. Solution of potassa, Dr. Duhring said, was his favorite application, though nitric acid and other remedies may be used, and also electrolysis.

TRANSLATIONS.

PEDICULI PUBIS ON THE EYELIDS.—Dr. Dallas (*Revue de Méd. et de Pharmacie*, No. 3, 1877) reports the case of a little girl, three years of age, who complained of constant itching in the eyelids, which she rubbed incessantly. Examination showed considerable redness of the oculo-palpebræ conjunctivæ, which was at first thought to be one of those cases of blepharo-conjunctivitis so common among scrofulous children. Closer examination showed two small granulations on the ciliary border of the upper lid. Their singular appearance led to their inspection by the aid of a lens, when it was perceived that they were pediculi pubis. Further exploration showed the child to be infested with these parasites. The treatment consisted in removing the pediculi and in mercurial inunctions. x.

HEART-DISEASE AND TRAUMATISMS.—At a recent meeting of the Académie de Médecine (*Bull. de l'Acad.*, 1877, p. 215) M. Verneuil read a memoir entitled "Observations upon Wounds in Subjects affected with Cardiac Disease." M. V.'s paper, which is a full one, terminates with the following conclusions. 1. Pre-existent car-

diac affections appear to be capable of retarding or preventing the cure of certain wounds by giving rise to local accidents, among which may be mentioned hemorrhages and diffuse inflammation. 2. As a result of these local accidents and their consequences, wounds are susceptible of reacting upon previous cardiac affections so as to aggravate them, and to provoke, prematurely, symptoms which in general only belong to their later periods. x.

Influence of Intra-Abdominal Pressure upon the Activity of the Kidneys.—E. Wendt (*Centralbl. f. Chirurgie*, 1877, p. 88; from *Archiv der Heilk.*, 17 Jahrg. 6 Heft) experimented upon himself most carefully in various ways. First he estimated the intra-abdominal pressure when sitting, standing, lying on one side or the other in bed and out, and also in the knee-elbow position. In the latter the pressure was negative, while the position on the side gave the least positive pressure. From this he secured the relative pressure in the neighborhood of the kidneys. In the first series of experiments he ascertained the amount of urinary secretion during ordinary diet, while maintaining a certain position for a series of hours. He found the most considerable secretion while lying upon the side. In the second series of researches he drank twelve hundred cubic centimetres of water at once, and measured the amount of urine excreted during successive quarter-hours. A similar result was obtained. On days when the side or knee-elbow positions were maintained the excretion amounted to 5.5 cm. On other days, when the sitting position was maintained almost continuously, the excretion was at the rate of 4.23 cm. per quarter-hour. x.

Excretion of Carbonic Acid by the Skin.—Fubini and Ronchi (*Archivio per le Sci. Mediche:* abstract in *Centralbl. f. Med. Wissen.*) experimented upon a man 27 years of age, whose fore-arm, after measurement of its area, was enclosed in a glass cylinder through which air previously deprived of carbonic acid was passed continuously. The air which thus carried off all the gaseous excretion was then deprived of its CO_2 by the usual means, and the amount of the latter accurately estimated, with the following results: In the dark, less CO_2 was given out than in the light (100 : 113); in higher temperature, more than in lower; during digestion, more than when the stomach was empty (112 : 100); and during a diet of meat, less than during a vegetable regimen (100 : 116). If the excretion of CO_2 from the entire surface of the body is proportionate to that from the fore-arm, 6.80 grm. of this substance is lost by the individual in a day. x.

Treatment of Complicated Fractures by Prof. Bardeleben (*Centralbl. f. Chir.*, 1877, No. 8; from *Charité Annalen*).—In Bardeleben's wards almost all resections and complicated fractures are immediately placed in plaster-of-Paris splints. In complicated fractures accompanied by small, fresh, bleeding wounds (seen within an hour or two), when there is no emphysema, reduction is first practised. Then the immediate neighborhood of the wound, perhaps for a hand-breadth around, is cleansed with three per cent. carbolic acid solution, the wound itself not being touched, with the idea that the putrefactive materials cannot penetrate against the stream of blood. Under other circumstances the wound is carefully washed out with a three per cent. solution of carbolic acid, then covered with "protective" and a thin layer of ten per cent. salicylic jute, and, as a first bandage, a piece of flannel which has been soaked for several minutes in ten per cent. carbolic acid solution. No cotton is employed. Erosions on the extremities are painted with a two per cent. solution of potassa before the dressing is applied over the first bandage; a second, of as rough flannel as possible, is placed, and this is covered with wet plaster of Paris. Over this last bandage is placed a plaster-of-Paris compress, and over this an iron plate from two to three centimetres broad and one-fifth centimetre thick, usually applied on the outside of the limb, but its position depending upon the seat of the wound. These are fastened down with bandages and plaster of Paris. A window is then cut, extending a couple of finger-breadths beyond the wound all around, and the edges of this are disinfected by means of an antiseptic putty (ten per cent. carbolic acid mixed to a paste with whiting). Finally coverings of antiseptic jute, etc., are placed over the window, and the wound closed, the limb being hung in a wire splint similar to Smith's anterior splint.

Generally such wounds, if dressed within twenty-four hours of their occurrence, heal aseptically. In fractures, when suppura-

tion has already set in, the wound is carefully cleansed with a five-tenths per cent. chloride of zinc solution or three to five per cent. carbolic acid solution, a compress of carbolized mull or jute applied, and irrigation with solution of carbolic acid begun. The latter is useful even when sepsis is already present. The solutions mentioned should be used first strong, then weaker. Carbolic acid poisoning is to be carefully guarded against. The plaster-of-Paris bandage may be placed in position after two to three weeks. x.

SOME METHODS OF ARRESTING HEMORRHAGES (*La France Médicale*, 1877, p. 85).—Dr. Créquy employs a solution of perchloride of iron, 30° Baumé in strength, with which he has succeeded in arresting hemorrhage from the nose even when tamponning has failed. He has had a canula constructed six centimetres in length (two inches), terminating in an olive-shaped bulb. The extremity of this bulb is closed, but the sides are pierced all around with fine holes, opening backward so that the fluid injected shall not escape into the pharynx. Two or three injections are sometimes necessary to control the hemorrhage. The same method may be employed in bleeding piles; but the above solution is too strong for this purpose, and is apt to be extremely painful. It should, therefore, be diluted with four or five times its volume of water. In metrorrhagia Dr. Créquy combines the sea-tangle tent with the liquor ferri chloridi, wrapping the tent with some tissue soaked in this solution. In case of hemorrhage from the bowel he employs a canula around which is wrapped a piece of rubber cloth, which being tied at each end and connected with a tube can be inflated after the introduction of the canula into the intestine. The latter permits the escape of gas, etc., and also blood if the inflation has not been sufficient, when this can be remedied. x.

CASE OF HEMIATROPHIA FACIALIS (*La France Médicale*, 1877, p. 107; from *Movimento Medico di Napoli*).—A case of progressive hemiatrophia facialis, the first known to Italian literature, the fourteenth (so far as known) on record in medical literature, is reported by Dr. Fanturi. The patient was a young man in good general health, and, so far as known, without hereditary taint of any kind. Following a fever, presumably typhoid, he noticed a circular patch on the face the size of a finger-nail, deprived of pigment, and the hair growing out of which was twisted and decolorized. Within two months this circular patch became transformed into a long cord (*trainée*), which progressed transversely on the temporo-frontal region up to the edge of the hair. When Dr. F. examined the patient he observed an atrophic patch which spread over the temple, the brow, the eyelids, and the nose. On the temporal region the face was atrophied to such a degree that the subjacent bone became prominent. The affected skin was smooth, glossy, and traversed by numerous fine blood-vessels; it showed no follicular structure, was somewhat analgesic, but preserved its electric sensibility. x.

LOCAL ACTION OF COLD.—Schlikoff (*Centralbl. f. Chirurgie*, 1877, No. 7; from *Deutsches Arch. f. Klin. Med.*, Bd. xviii. p. 577) undertook a series of experiments on this subject, measuring the temperature in various cavities of the body while ice was applied externally. The cavities examined were the mouth, hollow of the hand, vagina, intestine (through a fistula), cavity of the pleura (in two cases of thoracentesis), fistula (upper end of tibia). The bladders of ice were applied to the cheek, back of hand, abdomen, thorax, and leg in each case respectively. Schlikoff deduces the following conclusions: 1. Local withdrawal of heat affects the organs and tissues in order of their proximity. 2. The effect is less as the organ is farther removed from the point cooled. The various localities yielded the following results. Mouth (after one hour), at 9 centimetres' distance, a fall of 5.10° C. Hollow of hand (same time), at 2.5 centimetres' distance, a fall of 4.86° C. Pleural cavity, at 3.0 centimetres' distance, a fall of 2.50° C. in the same time; etc. Further, cold drinks reduced the temperature of the epigastrium, and cold enemata the surface of the abdomen. x.

DEEP INJECTIONS OF CHLOROFORM IN STUBBORN SCIATICA.—Dr. De Cerenville reports in the *Tribune Médicale* the remarkable results which he has obtained in this affection by inserting the needle of a hypodermic syringe profoundly into the flesh over the hip or thigh, and injecting thus thirty to fifty drops of chloroform. He alluded to two possible accidents,—anæsthesia of the limb and painful local swelling. Both of these, however, are of short duration. x.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, APRIL 14, 1877.

EDITORIAL.

PHYSICIANS IN COURT.

WE do not remember ever to have seen in print any form of protest against the utter freedom with which physicians are subpœnaed to appear in court, and this, too, with invariable disregard of the fact that serious results to patients may be the effect of this unthinking tyranny. Aside from their ordinary servitude, physicians, heaven knows, are burdened with a daily sufficiency of petty annoyances, which do not require mention here.

Now let it be asked whether the medical man have not good cause for righteous indignation, when, in the midst of his daily tribulations, he is ordered into court, at his busiest hour, there to cool his heels until called to the witness-stand. He loses hours, perhaps days. Called as a witness, he is cross-examined as an expert, badgered on points the difference 'twixt which is as tweedle-dum to tweedle-dee, but which the lawyers so present as to make the jury believe they are one to the other as zero to infinitude. Or, these crammers of a single night will pompously propound questions in relation to theories which were exploded and ridiculed before their grandfathers were born. If the medical witness then express the opinion that these theories are about as well grounded as the ancient belief that the sun revolved around the earth, mark the look of pity and surprise which crosses the face of the badger as he triumphantly nods to the juryman! Then comes the thundering question, "Do you mean, sir, to deny the published authority of one of the most gifted minds of the *sixteenth century?*" If the witness take refuge in some tremulous, stammering reference to Rip Van Winkle, the bold lawyer appeals to the court for protection from insult. What is the witness to him? Not a gentleman, a man of education, perhaps of renown the tithe of which the lawyer will never achieve; none of these. He is simply a pretender whom the attorney means to show up to the jury as a fool. This is the end and aim of the cross-examination. The purpose of the lawyer being accomplished, or foiled, according as the witness (all unused perhaps to such a position) be calm and cool, or embarrassed, the latter is turned adrift, to go about his business. He has lost hours of time, and, it may be, a handsome amount in fees. What is his remuneration? Nothing more than the miserable pittance allowed to the common witness, and for which no gentleman ever cares to ask. The testimony of a medical man is, in the majority of cases, probably far more important than that of any other witness, and yet his fee is no larger than that of the veriest clodhopper of them all. We look to the courts for justice. This feature, then, looms up as a huge paradox, a ridiculous inconsistency.

By way of illustration we may mention a case recently tried in one of the courts of this city. It was one in which the verdict turned upon a very delicate point, —viz., as to whether the man whose death had given rise to the trial were the victim of an organic disease, discovered post mortem, or of poison administered by the prisoner. The physician who testified in this case had been called simply as a witness, but, shrewdly anticipating a thorough bedevilment at the hands of the cross-examiner, had devoted many hours to looking up the best of modern authorities and in fortifying himself against flank movements. Once upon the stand, and he was questioned not only as a witness, but cross-examined and addressed again and again as an expert, questions being frequently prefaced, "As an expert, doc-

tor, what is your opinion, etc., etc.?" The verdict was based mainly upon the testimony of the so-called expert, who was obliged to abandon his practice for two whole days because of the trial,—a serious loss to him. But when he applied for the expert's fee he was calmly told that the Commonwealth *could not give him more than the fee of the common witness.*

There is, too, a most ignoble lack of courtesy towards the medical witness on the part of the courts, in deferred cases. For example, take a recent experience which has come to our knowledge. A case is set down for trial on a Monday at ten o'clock. The physician is promptly on hand, albeit at a most inconvenient hour. He is suavely informed that the case will not be tried until Wednesday at the same hour. In sweet and angelic mood the doctor turns away, to gather up as well as he may the broken threads of the day's woof. On Wednesday behold the poor slave again in court. The announcement is then made that the case will be deferred until the following day. The doctor begins to wonder whether it would be unchristian to make use of a gentle expletive.

On Thursday, quite habituated now to attending court, perhaps surprised, too, that he has never before realized what fun there is in being thus a toy of the law, he appears for a third time in this heaven on earth. An official then confidentially tells him that another case will probably first be called, and, if it should, then *his* case will be postponed until the *next term*, and if he will come back in an hour he will tell him definitely,—which the doctor does, to be told of a third postponement! By this time he is in the whilom frame of mind of a man who had among the school-boys the reputation of being frightfully profane. The boys one day overtook him as he was driving a load of potatoes up a very steep hill. Creeping up, they quietly let down the tail-board of the wagon, then followed at a distance to watch effects. When the man had reached the top of the hill, his horse stopped to rest, and he then discovered his mishap. Looking now at his half-empty wagon, now at the long wake of potatoes behind it,—never suspecting the boys, who were awaiting the explosion,—his face purpled as he said between his teeth, "—— ——, boys, I can't do the subject justice."

This rank injustice of the courts makes one writhe; and it cuts two ways: it costs the medical man time and money. But how we are to avoid becoming victims?

MILITARY AND NAVAL MEDICAL SCHOOLS.

A VERY interesting report upon the military and naval medical schools of France and England has been made by Medical Inspector Richard C. Dean, U.S.N. The plan adopted in the two countries is different. In France the candidate enters the governmental school at the commencement of his professional studies, and, after a period of study and examination, is given six months' leave of absence, and an allowance in money to enable him to take a diploma from one of the universities. In England, medical graduates aspiring to military honors pass, as with us, through a competitive examination, but, instead of at once being sent to active service, spend four months at the famous school of Netley, where they are carefully trained in the special matters of their peculiar calling. Of the two plans, the latter seems the better, because it spares the government the expense of the whole education, and enables it more completely to pick its material, and also to specialize its instruction.

In our own army and navy the severity of the competitive examination is such that there can be no doubt as to the general professional knowledge of the staff. It, however, can hardly be otherwise than that there is a lack of that special, practical informa-

tion, military and naval, which is drilled into the English surgeons at Netley. We wonder how many of our medical officers could fully answer the following question, taken from the Netley Examination Paper: "What are the points to be attended to in order that the greatest amount of work may be got out of the soldier with the least chance of injury to him?"

Now that the engineer corps of the United States Army has an especial school, it is possible that the wants of the medical corps may be thought of. But we sincerely hope that the teaching may be as in England,—after, not before, entering the service,—may be especial and not general. If this were done, there could be no competition with civil medical schools, and none of the Congressional complications which might possibly come from such cause.

STATE BOARDS OF HEALTH.—We have received reports of the State Boards of Health of Georgia, Wisconsin, Minnesota, and Michigan. All of them contain sufficient to justify the existence of the Boards, but the Michigan report appears to be the best. Many of our readers may remember the health tracts of John Brown, of Edinburgh. We would suggest that a very important work might be done by having distributed well-written sanitary tracts. The success of tracts in religious matters is thought to justify the expense; and certainly this method might be availed of in spreading a practical knowledge of hygiene. Would our tract societies aid?

AN ELECTUARY AGAINST TAPEWORM.—Dr. Du Plessis gives the following prescription:—Kameela, 6 to 12 grammes; pulp of tamarinds, 30 to 40 grammes; cedar juice and syr. cort. aurant. *ad lib.* It is taken in one dose in the morning before breakfast. With bothriocephalus the cure is generally a radical one with one dose. For tænia a stronger dose is advisable.

DR. E. CROSS has found chloral of great service in diabetes mellitus.

CORRESPONDENCE.

LONDON LETTER.

SINCE my last letter, in which I alluded to the mildness of the season, we have had some more seasonable weather, with the effect that the smallpox epidemic is declining steadily in the northeastern districts, though enlarging its area, especially westward. There is little of interest going on in the medical world: so perhaps some account of the *medical charities* of Great Britain may not be uninteresting to your readers. These are of various orders. There are the staple *general hospitals*, where all cases, except smallpox, are admitted. In many now, however, all infectious disease is declined, and if any cases break out in the hospital they are removed to fever hospitals, where such institutions exist. In the old Royal Infirmary of Edinburgh the student could see everything, from an operation on the eye to the progress of confluent smallpox. More recently, however, a smallpox institution has been set up, and the last time I was in the old smallpox wards they were occupied by typhus fever patients. These special hospitals for infectious disease are now being generally established: in towns of any bulk, permanently; in lesser places temporary hospitals, sometimes of wood, are built during epidemics. The well-known London Fever Hospital in Islington is the model on which the others are carried on. Then there are the *special* institutions:—the chest hospitals; the orthopædic; the cancer; St. Peter's, for stone, and St. Mark's, for fistula; the hip; the ophthalmic, three or more of them; the children's, several; the lying-in, several; the hospitals for women in solo; the Samaritan (Mr. Spencer Wells's place); one for the incurable, etc., etc. All these institutions compete for public favor, alike for patients and subscriptions, with the large general hospitals, which have their special departments; and that, too, not without success. Nor is this difficult to understand. At the special hospitals there is no great body of students like that on which the work of the honorary officers largely falls in the outpatient departments of those hospitals to which are attached schools of medicine. A large class of patients, especially of the better order, prefer a hospital where they learn to know and to recognize their medical adviser, instead of having hazy speculations as to which of a series of gentlemen whom they have seen is their real and true physician. Also the public are largely of the opinion, right or wrong, that at these special institutions the subjects are more studied and better understood. At the special hospitals, too, are to be found those energetic men who are kept off the staff of the general, and especially teaching, hospitals, by jealousy, but who are determined not to be blocked thereby. Of course special in-

stitutions must, for their own sake, get the men who have worked at their specialty, in order to hold their own in public estimation. Then there are a very useful body of institutions called *dispensaries*. They differ from hospitals in this respect. The hospitals have beds, and so can admit in-patients; the dispensaries have no beds, but they attend poor patients at their homes. Each has its out-patient department. As a rule, dispensaries avoid midwifery, as that would break up the systematic working too much. In some the resident officers are permitted to take any midwifery they may secure, in so far as that does not interfere with the routine work of the institution. As a rule, however, midwifery is handed over to the poor-law medical officers, and the patient gets an order from the overseers of the poor, or the relieving officer, for the union doctor to attend her when she requires it. Night-work also is avoided, for if the resident officers of dispensaries, upon whom devolves the duty of home visiting, were liable to be knocked up gratuitously by any person at will, they would soon be unfitted for their proper duties. Much, too, depends upon the committees of dispensaries, some of which are fairly sensible and conscious of their position and duties; while others consist of men retired from business, and ambitious tradesmen who cannot get upon the town council, so perch on a lower bough till they can see their way upwards. The dispensaries of the larger towns—Liverpool, Birmingham, Leeds, etc.—are well-known institutions; in Manchester the hospitals and dispensaries are worked in unison. Harmony betwixt the dispensary and the hospital is very desirable, as by such means the best cases from the dispensary home patients can be sent into the hospital; while the dispensary visiting district officers keep an eye on all interesting hospital cases when they are discharged, so that their future history is not lost sight of. The dispensary practice of the towns in the manufacturing districts ought to be more attractive to the better class of men at the London hospitals, who hope to some day get on the staff of their hospital. Such men would see a lot of practice, as accidents, etc., which would be of great value to them; while they would learn much from the home visiting which they never can acquire by remaining in town, unless they attach themselves to some metropolitan dispensary as resident officer.

In the larger towns there are attempts made to imitate the special hospitals of London, while in smaller places one hospital has to serve, or even a dispensary. Recently cottage hospitals have sprung up, and are on the increase. In many cases they are really cottages, with a sensible middle-aged widow in for a nurse, while others are more pretentious and have half a dozen beds. All the institutions mentioned so far are "supported by voluntary contributions," and this is usually written upon some conspicuous portion of the building. In no case is state aid given. The institutions which belong to the state are the *workhouse infirmaries*, of which the large Central London Sick Asylum at Highgate is the most famous. In that hospital there are five hundred and seventy beds, filled largely with the most interesting cases, and under the supervision of an excellent resident officer: so that it is as well worthy of a visit as any hospital in London. These state infirmaries are, most unfortunately, not utilized for teaching purposes; and yet, as on the Continent, they are the most suitable of all hospitals for the purposes of teaching. Such patients rather ought to be made the subjects of teaching than ought the recipients of private charity; while a stimulus would be given to the study of pathology by the fact that such patients could not discharge themselves, and hide themselves to die, when they discovered that a post-mortem examination in their case would be eminently desirable. For scientific purposes these hospitals are practically lost and wasted, as the officials are generally too hard-worked (and insufficiently paid) to do more than their routine duties. They are under the control of the guardians of the poor, *i.e.*, the guardians elected by the rate-payers, and controlled by the Local Government Board, the central authority which looks after the working of all local boards in connection with the funds procured by the rates. The institutions supported by voluntary contributions are ruled by committees who are not responsible practically to anybody, who re-elect themselves, and are only ousted when their management, or rather mismanagement, rouses the wrath of the subscribers generally. Consequently we find medical teaching and the appointments to the great hospitals in the hands of an irresponsible body of laymen who can too often be led by the nose by an influential member of the medical staff, or are actuated by personal feeling either of partiality or antagonism, and who have no time, even if they had the inclination, to scrutinize closely the qualifications of the different candidates; so that the election of any man on the staff is a chance, and commonly influence bears down merit. On each hospital there are a few good men who sustain its reputation, and betwixt them and the hospital a number of incompetent and idle men are floated before the public. Really, after all, it must be admitted that the wonder rather is that so many good men are secured by such a plan of election. Of the good men not secured by this plan, it is necessary to be somewhat intimately connected with each hospital in order to have any fair comprehension of what is lost to the nation and still more especially to the medical world by this system.

The workhouse infirmaries just mentioned are, however, but a small part of the parochial medical relief of the kingdom. They are confined to large towns. For rural districts and

smaller towns the *workhouse* is really a hospital. Each county is split up into several divisions, called "unions," for parochial purposes. Each union consists of a number of parishes, and is provided with a workhouse, to which are attached a medical officer, a master and a set of under-officials, and a chaplain. This workhouse is now but to a slight extent a labor-house, except its tramp ward, where each man breaks so many cubic feet of stones for road-making, to pay for his supper, bed, and breakfast. It is rather a refuge for the infirm, the aged, and the sick poor, and for girls who have been seduced and dare not go to their friends to be confined. It also contains a number of pauper children, and has a school attached to it. Besides these central workhouses, each union is divided into districts, each of which has its own *medical officer*, who looks after the paupers in his district. He receives from the guardians, periodically, a list of those who are permanent paupers and entitled to his attendance when they require it. He also is required to attend all persons who present to him an order from the relieving officer, or the overseers, for his services. The guardians usually see that these occasional orders do not become oppressive, as each special order usually is accompanied by a disbursement. The union officer also visits the various harmless lunatics in his district quarterly, for which he gets a small fee. Orders for midwifery are very charily granted, in rural districts especially, and the union surgeon usually has to perform a great deal gratuitously which ought to be paid out of the rates: if he stood out for his legal rights he would become very unpopular and be regarded as very hard-hearted. Thus it comes to pass that in addition to his defined duties the *parochial surgeon* (the term "*union*" *surgeon* is usually reserved for the officer who has charge of the workhouse) has to do a great deal of unpaid work for his very moderate salary. It is not uninteresting to look into the reason why men, and many of them really good men, hold these parish appointments as long as they can possibly keep hold of them. In the first place, the salary is something, where otherwise they would in all probability get nothing for their services to the poor. In the next, if they resigned them some one else would get a footing in their district. In rural parishes this is a most important affair. The surgeon on the spot gets the parochial appointment and the *benefit clubs* (to be described at some future time), and then he can defy all comers. To resign them would be to invite a new-comer to enter his chosen area. They form part of the bargain when the practice is sold, and are usually stipulated for in the agreement. Once secured, the purchaser is safe in the saddle, and the private practice usually follows them. The appointment of parochial surgeon is made by the local guardians and approved by the central Local Government Board ere it is valid. Once made, the surgeon cannot be turned out without the acquiescence of the Central Board, and that is obtained only on valid grounds. The parochial officer once in the saddle is safe from all but annoyance, of which he commonly gets a sufficiency. Paupers usually are not troublesome about attendance, unless the doctor gets wrong with the parson,—a not uncommon event,—and then he is a good deal worried; but they have a wonderful appetite for medicines. For most paupers a bottle containing some medicinal or reputedly medicinal compound is a *sine qua non* for peace; and some very nasty compound it usually is. At one time the doctor had to furnish quinine and cod-liver oil out of his salary, but now the guardians usually furnish these costly agents; while in large towns, parochial dispensaries are provided to dispense the doctor's order. In rural districts the doctor generally has some cheap, effective, but unpalatable compounds for his permanent paupers, and these disappear too fast to encourage him to indulge the paupers with less nauseous mixtures. These parochial medical officers are of immense service, and do a great deal for their money. Of course there is an everlasting warfare betwixt the surgeon and the board of guardians about the extras beyond the fixed salary,—a warfare usually carried on keenly but with perfect good temper. At times the doctor is pugnacious, or there is some objectionable member of the board who goads humanity beyond its utmost limits of endurance; and then an active quarrel develops into a feud which keeps the union in hot water.

Of course all parochial surgeons are not alike. Some are God-fearing men, and the paupers are well attended to. At other times the doctor is less scrupulous, and makes friends with the relieving officer and the troublesome members of the board of guardians, and then the poor are apt to be sadly neglected. Much indeed depends upon the *relieving officer*. This is an official who is appointed to visit the poor, to pay them their relief, to receive applications for relief, to investigate such applications, to attend the board meetings, to give orders on the parochial surgeons to attend any poor person not necessarily in the receipt of relief, and to check the medical orders for wine, beef-tea, etc. It is obvious where this official is a good honest man he does his own work and sees that the surgeons do theirs. But if he is a scoundrel then he bullies the doctors, gives unnecessary orders, and keeps right with combative elements of the board; or he enters into a friendly alliance with the surgeons, gets his lunch and a drink with them on his rounds, and then the board is nearly powerless to make the services of its officers efficient. The most fertile sources of battle betwixt the parochial surgeons and their boards arise in cases of prolonged catheterism,

where the doctor usually either has a good thing or suffers much hardship, according to the contract betwixt him and the board,—a certain amount of variability as to extras being permitted by the law; and next midwifery, which is the source of many heart-burnings. The board usually tries to manœuvre so that the doctor at the last minute attends gratuitously sooner than let the woman suffer a great risk with attendant unpopularity to himself; at other times the doctor is cool and selfish and is too many for the board. When the woman is too ill to be moved to the workhouse, or out of bed indeed, an application is made to the village overseer for the doctor, who by the time he gets on the spot probably finds all over, or a case for forceps, for which he receives an extra fee. The office of *overseer* is a troublesome one for the holder, as if he gives an order on the doctor which the guardians will not endorse, he is liable to have to pay the doctor himself; on the other hand, if he refuses the order and the woman dies, he is liable to be tried for manslaughter. As to the intrigues, the contentions, and the squabbles which go on in the complex arrangements of the parochial system, volumes, not altogether uninteresting, might be written. Also an exciting chapter might be written as to the way relieving officers play upon public institutions, especially the dispensaries, and contrive to make the dispensary officers do a great deal of the work properly belonging to parochial surgeons, and indeed to themselves. They are up to the turns of the law, while the young dispensary surgeons are not; but every now and again they catch a Tartar: only it may require long months of waiting to get a case where the relieving officer cannot by any turn or twist wriggle himself out of his scrape.

Epidemics rarely assume such a form in the country as to necessitate the Boards of Guardians to build temporary hospitals; and in towns this duty falls upon the Boards of Health. Temporary wooden buildings are often erected, especially when smallpox is rife.

At the Medical Society there has been a discussion on Vegetarianism, enlivened by the presence of two leading vegetarians, Professor Newman, and the author of "The Pilgrim and the Shrine." It appeared, however, that the admission of milk, eggs, and cheese into the dietaries of most vegetarians rendered such dietary non-vegetarian to a considerable extent. It was contended by the advocates of the system that vegetarianism did away with persistent constipation, and by the improvement in the general health enabled the individual to do much more intellectual work. Dr. Thin gave an account of an island in the Malayan Archipelago inhabited by Buddhist priests, where the dietary is strictly vegetarian without any obvious deterioration of the health being induced thereby. Sir Joseph Fayrer stated that the Rajpoots of the northwestern provinces of India were strict vegetarians. They would lose caste if they touched milk or an egg, much less ate them. They were a well-grown, handsome people, with genealogies stretching back far beyond anything known in Europe. The Rajpoot, however, lives largely upon pulse; while the less perfectly developed Bengalee lives mainly upon rice. The introduction of the highly nitrogenized seeds of the leguminosæ into the dietary has compensated for the absence of animal food, and thus a fine physique with much power has been attained. The rice dietary of the Bengalee was inferior in every way; only it was often partly mixed with a cheap form of pulse. The dietary of the Rajpoot approaches closely the Revalenta Arabica so largely sold, and whose good effects in certain cases of concealed gout are so unquestionable. The practical upshot of the discussion was that if glycogen and albuminoids could be furnished to the system in sufficient quantities it mattered little whether they came from the animal or vegetable kingdoms; that some persons required, however, larger quantities of animal food than others; while on the other hand some persons, especially those of a gouty tendency, were equally well if not the better for a dietary almost exclusively vegetarian. Where the habits were sedentary this was specially the case. There was great agreement of opinion that in tropical climates animal food should be but sparingly indulged in, and the more the European adopted the native dietary the better his health would be.

The question of a successor to Sir William Fergusson has exercised the minds of many. The idea of tempting Lister to leave Edinburgh for King's College was mooted. The students at Edinburgh, to the number of seven hundred, signed a memorial to Prof. Lister asking him to remain with them, and on the receipt of it Prof. Lister said that there was nothing in London to tempt him away. Unfortunately, however, he gave expression to some rash opinions as to the teaching of clinical surgery in London, which have roused the surgeons of the Southern metropolis into wrath, and which were as uncalled-for as injudicious. It is probable, then, that King's College will adopt some other alternative to fill up its staff. King's College has been singularly unfortunate in driving away its best men and not attracting them back again. For instance, Christopher Heath, of University College, and Prof. Bellamy, of Charing Cross, are both King's men, either of whom would be a credit to the staff of King's College Hospital. The intrigues of the governing body in driving away their best men, and then having to get in strangers to maintain the reputation of the school, have not only done much to impair the efficiency of King's College Hospital, but they have lowered its prestige and restricted the numbers of students entering. Where the governing body is not actuated by the highest

motives on all occasions, the executive is apt to become deteriorated too.

The subject of the treatment of the individual as well as of the disease is one now attracting much attention. The following cases illustrate this well. A boy of seven had unilateral chorea, for which bromide of potassium and iron were prescribed, but failed to produce their wonted good effects. Noticing a little serrated front tooth peeping out, the probability of congenital syphilis was suggested, and five grains of gray powder at bedtime were added to the preceding mixture. The improvement which followed was swift and complete. Just as the boy was proceeding satisfactorily, his sister, aged twelve, became the subject of severe bilateral chorea, for which bromide of potassium and iron were given. She presented no evidence, however minute, of congenital taint, and, as it was possible that the infection might have been acquired after her birth, no mercurial was given. The case growing worse rather than better, she was taken into hospital. She had had a grain of opium at bedtime in order to procure some sleep. As she had not improved under the treatment for three weeks, a twelfth of a grain of the bichloride of mercury was added to the opium pill at bedtime. In two or three days the chorea was much reduced; and the case is improving rapidly. The girl had been kept in bed at home, so that the removal to hospital cannot be entirely credited with the improvement; the addition of the mercurial has certainly influenced the results. The power which syphilis exerts over the progress of intercurrent disease is now generally recognized, and these cases show how important it is to detect this taint and to allow for it in the treatment. The drugs which ordinarily are sufficient are powerless till the taint is recognized and the specific element added, after which the case progresses in the usual satisfactory manner.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, JANUARY 25, 1877.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Abortion of twins. By Dr. JAS. C. WILSON, for Dr. H. G. LANDIS, of Niles, Ohio.

MRS. J., æt. 35, only child born in April, 1875. In October, 1875, the menses reappeared, and were regular until April, 1876, at which time they ceased. She supposed herself to be pregnant until October, when, finding no other sign of pregnancy, she abandoned the idea. From the 1st of October there was an occasional show of blood ("just enough to stain a napkin") occurring at irregular intervals and continuing for a week or more at a time. For some time she has been feeling in excellent health, and just before Christmas she was examined by an experienced practitioner, who pronounced her not pregnant. On January 1, 1877, she helped to prepare a dinner, received company, and felt unusually well. At noon a decided flow of blood occurred, continuing throughout the day. At 6 P.M., feeling slight pains, she took a sitz-bath. At 8 P.M. I was summoned to her bedside, and found the accompanying specimen lying in the bed, the recent appearance of which was as follows: Fœtus No. 1 was five inches in length, and was enclosed in unbroken membranes containing about six ounces of liquor amnii; to it pertained a placenta of comparatively large size. Fœtus No. 2 was three and three-quarters of an inch long, enveloped in membranes from which the water had escaped. Its umbilical vessels ramify on the membranes and approach the edge only of the placenta, thus accounting for its apparently inferior development. This inferiority is, however, only apparent, since No. 2 has a well-developed anus and the beginning female genital fissure, while the breech of No. 1 is absolutely bare. About No. 1 were several masses looking like coagulated lymph and at places so adherent as to resemble vegetative growths, concerning which I would ask the opinion of a committee. The placenta had the gross appearance of extensive fatty degeneration. Both fœtuses had evidently been dead for some time, and their color is not materially changed by the alcohol in which they are immersed.

The point of especial interest is the unequal development, in which quantity and quality appear to be in inverse ratio. I would also offer the opinion that we have here a case of double-yolked ovum, in which the allantois of one was projected against the decidua vera, or rather against a part of the ovum which subsequently was brought in juxtaposition with that membrane; while the allantois of No. 2 fell in relation with the decidua reflexa, and therefore failed to develop a placenta.

Myoma of the uterus. By Dr. J. C. WILSON.

The specimen was removed from the body of a colored woman, E. D., 67 years of age, who died in the medical wards of the Philadelphia Hospital, January 16, 1877.

She entered the ward on the 6th of this month, and presented on examination the following conditions: great feebleness, extreme emaciation, marked ascites, no general œdema, no dropsy of the lower extremities. The apex of the heart was displaced to the left; the first sound was distinct. The radial arteries were highly atheromatous.

The debility was so extreme, and it was coupled with senile degenerative changes so pronounced, that it was deemed inexpedient to disembarrass the abdomen of the fluid

which distended it, and it was, therefore, not possible to reach a diagnosis.

Stimulus, suitable diet, iron, mild cathartics, and diuretics were ordered. She nevertheless grew rapidly more feeble, and, ten days later, died. The left ventricle was found after death to be somewhat hypertrophied: the mitral valve-leaflets were thickened.

There was collapse of the right lung, and some passive effusion in both pleural cavities. There was a large collection of straw-colored serous fluid in the peritoneal cavity. The kidneys were contracted and granular, and the pelvis of the right one was dilated by reason of obstruction of the ureter by pressure of the tumor. At several points there were signs of old local peritonitis, such as adhesions of the coils of intestines and thickening of parietal peritoneum. The pelvic cavity was occupied by a tumor the size of a cocoanut, which on investigation was found to consist of the altered tissues of the uterus. This mass was connected to the neighboring parts by ancient inflammatory adhesions, among which in dissection were discovered the atrophied ovaries. The tumor is large, its surface nodulated. Some of these nodules are firm; one or two are partially calcareous, whilst several are so soft as to give the sensation of a fluctuating fluid within. The sound enters the uterine cavity to the depth of four inches. On section the neoplasm is found to have invaded the uterine tissue in all directions.

Dr. WILSON said the question of the propriety of running the risks of any operation for the removal of the abdominal fluid in this case gave it some clinical interest. The woman was under his care ten days, during which time the belly was enormously distended with fluid. No previous history could be obtained; her debility was extreme; senile changes were very marked. Would it have been right to evacuate the fluid for the purpose of reaching a diagnosis? It did not seem probable that any treatment would rescue her; whilst the removal of the fluid, or indeed any operative procedure, might have been followed by such a catastrophe as fatal collapse. If she had been tapped, the tumor would have been discovered.

Dr. HODGE asked what was the probable cause of the ascites.

Dr. WILSON replied that none was detected other than the tumor. It was a matter of interest that, beyond the fact of this ascites, the woman was very feeble, emaciated, without œdema and without pitting of the lower extremities. The condition of the liver and kidneys was of course to be taken into consideration, but there was certainly nothing about the liver to account for it. No other abdominal viscera except the uterus were involved. The heart was hypertrophied, but, although the valves were thickened, they were competent.

Dr. HODGE said some tumors of the uterus are said to produce ascites, although he did not think he had ever had a patient under his care in which this was the case. He thought Dr. Wilson had been correct in his treatment, and that there was no need of tapping the woman at the risk of her life.

He thought that still another fact of interest in connection with these tumors of the uterus was the apparent sense of fluctuation they often give, and unless one happen to be familiar with the fact it is almost sure to mislead. Not a few operators have made the mistake of plunging a trocar into such a mass, and have even done so after they had opened the abdomen for its removal.

Dr. W. H. PARISH said that four years ago he had seen a case analogous to this at the Philadelphia Hospital. The woman was admitted to the medical ward with dropsy, then taken to the obstetrical as a case of pregnancy, then into the ward for diseases of women, and then back into the medical ward again, where she came under Dr. P.'s care. Her menstruation had ceased six months before, and her abdominal dropsy was so great that one night he thought best to tap her. Her exhaustion was doubtless not so great as that of Dr. Wilson's patient, and the woman was not so old. But after the tapping the tumor was easily diagnosed. After the tapping, in the course of a few months the dropsy returned, and she was again tapped. She finally died, and at the autopsy the diagnosis of a subperitoneal fibroid tumor was confirmed. In that case tapping was of great service. He did not think he would tap in similar cases unless extreme symptoms like those in his own case prevailed. He thought it not impossible that peritonitis might supervene.

Dr. HODGE thought the danger of peritonitis from tapping amounted to almost nothing when done with a siphon trocar, by which no air can enter. Even when a solid tumor of the uterus is punctured, apparently no inflammation results.

Dr. WILSON said he had not thought of the possibility of death from peritonitis so much as from collapse.

Scirrhous cancer of the stomach. By Dr. J. M. BARTON.

The specimen here presented was sent to me from the interior of the State, with a request to obtain the opinion of some of the profession here as to its pathological character.

The notes of the case are by no means full.

The patient, a man, probably over 50 years of age, had not been healthy for several years, complaining of no pain, but merely a distressed feeling in the stomach when exhausted. It was not until two months before death that he suffered from vomiting, which was quite persistent, occurring after every meal.

About the middle of last month considerable quantities of dark-greenish, unhealthy-looking pus, accompanied by a fluid having

somewhat the appearance of coffee-grounds, were vomited, the latter fluid frequently reappearing during his illness.

Report of the Committee on Morbid Growths, February 8, 1877.—"A microscopic examination of the stomach presented by Dr. Barton shows, by a transverse section of its wall, the mucous and submucous membranes to be infiltrated with tube-like collections of epithelioid cells, which upon transverse section show the cells arranged in a somewhat concentric manner, having no central lumen. Between the tubuli is seen a fibrous-tissue stroma. The morbid growth may be classed as a 'scirrhus ventriculi.'"

Scirrhus of the mammary gland. By Dr. J. M. BARTON.

The specimen was removed yesterday from Mrs. C., aged 51 years.

It is of interest in connection with that of malignant disease of the stomach just presented. In neither case did any symptoms present themselves until quite recently, and at no time was either the seat of any pain.

This tumor presents the usual appearances of mammary scirrhus. Notwithstanding the evident age of the growth, as shown by its size and the fact that some portions had already become softened, it had failed to attract the attention of the patient until a few weeks previous, and then only by its weight and bulk, and not by pain.

Report of the Committee on Morbid Growths, February 8, 1877.—"The mammary gland presented by Dr. Barton exhibits all the characteristics of a scirrhous tumor."

Ovarian cyst. By Dr. H. LENOX HODGE.

The cyst was removed from a patient 60 years of age, by the operation of ovariotomy, seven days ago. She has thus far done perfectly well, and has had no bad symptom. The cyst weighed with its contents twenty-two pounds, one pound being the weight of the solid portions, the rest being that of the fluid. The fluid was of a light straw color, sp. gr. 1008, and did not contain albumen. It has been referred to the committee of this Society on the so-called ovarian cell, for examination. In October last I tapped this same patient, and the fluid then drawn from this cyst was clear and like water, almost colorless, sp. gr. 1007, and did not contain albumen. It was also handed to the committee for examination. The Society, therefore, has the advantage of comparing the results of the two examinations of the fluid with the cyst as obtained by the operation.

The tumor, as viewed from the exterior, appears like one large cyst, but through its walls one or two smaller cysts can be felt. The pedicle was long, thin, and narrow. The Fallopian tubes are greatly elongated and spread out upon the tumor. The remains of the ovary, much flattened, can plainly be seen in the outer wall of the tumor. Upon opening the cyst, on the interior wall the remains of smaller cysts could be seen, which apparently had broken into the larger cyst. One cyst as large as an apple remained, but communicated with the large cyst by an opening of the size of the finger, in its inner wall. Another cyst, of the size of a marble, remained perfectly distinct, and filled with a reddish gelatinous substance. This cyst was situated about two inches distant from the ovary. On the inner side of the ovary, and projecting into the cavity of the large cyst, were several small cysts.

The examination shows that the case is one of true ovarian disease. The disorder may have begun in the ovary, or it may have originated in the broad ligament and extended to the ovary.

Dr. JAMES TYSON had examined, at the request of Dr. Hodge, the fluid removed from the cyst, with the following results. It was quite transparent, but exhibited a slight yellowish tinge, being in this respect different from the product of the previous tapping, which was colorless. The fluid when examined for albumen by Dr. Tyson (this test was deferred until the fluid was eight days old) was found to contain a small but easily appreciable quantity, had a sp. gr. of 1008, reaction neutral, and on microscopic examination was found to contain a *very small number of the granular* (so-called "ovarian") cells and an occasional compound granular cell. Of the "ovarian cells," two, three, and four were found in a single field of a one-fifth object-glass.

Dr. HODGE said he considered the changes in the fluid removed at successive tappings to be of great interest. He recalled another case, that of a lady from New Jersey, from whom he had removed a fluid having all the characteristics of that from a cyst of the broad ligament, being clear like spring-water, and not at all albuminous. At the second tapping it presented a light straw color, and came back quickly. At the third tapping it had all the characteristics of a fluid from an ovarian cyst.

Dr. F. P. HENRY said the changes in the fluid might be explained by the varying blood-pressure. After tapping, the pressure in the interior of blood-vessels is greater and the albumen more likely to exude than in the slow process of growth of the tumor.

Dr. HODGE said the specific gravity of the first tapping was 1007, that of the second 1008.

Dr. J. EWING MEARS said it is well known that in cysts of the broad ligament the fluid is a clear spring-water fluid, and in his experience with them he had never been able to find any solid elements nor any albumen present. With regard to the fluid of ovarian cysts, he was of the opinion that the changes in appearance and constitution which are observed to take place after successive tappings indicated changes in the cysts which attended their development. In simple unilocular cysts, in the early stages of develop-

ment the fluid obtained at the first tapping usually presents the following characteristic features. In color it resembles somewhat ascitic fluid,—may be designated straw-colored,—of rather low specific gravity, not very albuminous, and slightly viscid. Microscopic examination does not reveal the presence of cellular elements in great quantity.

In multilocular cysts, on the contrary, the fluid is of a dark chocolate color; of high specific gravity; highly albuminous, and very viscid. The microscope shows the presence of a large number of granule-cells, blood-corpuscles, granular débris, and sometimes cholesterine plates. Fluid of this character is that commonly regarded as distinctive ovarian fluid. When, therefore, it is found that the fluid removed at successive tappings presents marked changes in appearance and character, he thought it was correct to assume that there had occurred corresponding changes in the nature of the cyst. With regard to the presence of cells in the fluid of cysts of the broad ligament, he did not believe they were at any time found in large quantities. These cysts are lined by cylinder epithelium, and it is possible for some of them to appear in the fluid: he did not think they underwent the rapid fatty degeneration characteristic of the cells lining true ovarian cysts, and hence they would not be thrown off in such numbers, and when exfoliated would not be so altered in appearance.

Dr. HODGE desired to know of Dr. Mears whether he thought the fluid of a second tapping of a cyst of the broad ligament would lose its spring-water appearance.

Dr. MEARS replied that he did not think it would. The admission of air within the sac at the time of tapping might produce some conditions which would change the appearance and character of the fluid. He did not think the changes could be similar to those which had been observed to take place in the fluid of ovarian cysts after repeated tappings. In cysts of the broad ligament tapping is thought by some ovariotomists to be curative, as the cysts did not refill. He thought that Dr. Atlee recommended excision of a small portion of the cyst-wall, as sufficient to effect a cure.

Dr. HODGE said that Dr. Atlee formerly thought tapping was a cure for cysts of the broad ligament, but, finding that they returned, he devised the operation of removing a portion of the cyst-wall through a small abdominal incision. Now, however, Dr. Atlee believes that the whole tumor had better be removed, as in ovarian tumors; also that the tendency of ovariotomists now was to remove cysts of the broad ligament if they refilled after repeated tappings, as they sometimes do.

Articulating surfaces of femur and tibia from a case of excision of the knee joint. By Dr. JOHN ASHHURST, JR.

The patient, a lady 30 years of age, sent to Dr. Ashhurst by Dr. Massey, of West Chester, had suffered from disease of the knee-joint for twenty-three years. The limb was bent almost to a right angle, frequently painful, and very sensitive to cold. The tibia was by measurement four inches shorter than that of the opposite side, and the whole leg and foot smaller than their fellows. Several depressed cicatrices marked the site of former abscesses. The patient walked with difficulty with the aid of a crutch and of a shoe provided with a sole seven inches in thickness, and, finding her condition yearly becoming worse, was willing to submit even to amputation if that should be thought necessary.

As, however, her general health was unimpaired, and her limb showed rather the effects of past disease than the presence of any actively morbid condition, Dr. Ashhurst thought the case a suitable one for excision, and accordingly resorted to that operation on January 8, 1877. The intra-articular structures were found almost entirely destroyed, the inner condyle of the femur being firmly united by bony anchylosis to the tibia, while the latter bone presented a large spot of softened and carious tissue. The soft structures in the popliteal space were so much contracted that, after the removal of as much bone as was thought proper, it was necessary to divide the external hamstring tendon in two places in order to bring the limb into a straight position. The progress of the case since the operation had been entirely satisfactory.

A cutaneous proliferous (sebaceous) cyst. By Dr. ASHHURST.

The growth, the size of a filbert, was removed from the orbital region of a boy 9 years of age. An unsuccessful attempt had been made by another surgeon to effect a cure by the injection of a solution of carbolic acid. The cyst appeared to have very thick walls, no doubt from the accumulation of epithelial débris in its interior, and could only be removed by careful dissection, being firmly adherent to the periosteum. Dr. Ashhurst referred to the importance of early excision in the case of these orbital cysts (which were usually congenital), as if neglected they sometimes led to erosion or even perforation of the bone, and might prove fatal by inducing meningeal or cerebral inflammation.

A firm adenoid tumor from the mammary region. By Dr. ASHHURST.

The tumor, removed from a young married woman, and which had existed for nearly a year, was about the size of a filbert. Though not painful, it was a source of annoyance to the patient. Upon removal, it was found that, though apparently quite distinct from the mammary gland, it was actually connected with the latter, a condition which, as pointed out by Birkett, invariably exists in the case of these outlying mammary growths. The tumor was invested with a distinct capsule of connective tissue, and with it was removed the adjoining portion of the mammary gland.

Extensive fatty degeneration of muscle. By Dr. H. LENOX HODGE.

These specimens are sections of the gastrocnemius and soleus muscles, removed from a subject in the dissecting-rooms of the University. There is no ante-mortem history of the case. The limb, however, had probably been little used, on account of a club-foot which appeared to have existed congenitally.

The sections have the appearance of pure fat in the form of the muscles, and when placed in ether undergo solution and only some shreds of fibrous tissue remain undissolved.

REVIEWS AND BOOK NOTICES.

HOURS WITH JOHN DARBY. Philadelphia, J. B. Lippincott & Co., 1877.

Medicine always was a liberal science and art, and its votaries always were found in all the higher pathways of life. It has been asserted, however, that practice is a coy maiden, full of jealousy, and that he who would win must woo her alone. Yet we see science, art, literature, yielding their triumphs to men who are doctors not merely *de jure*, but also *de facto;* men who depend upon their profession for the most serious of all interests,—bread and butter. In our country no great doctor artist or musician has as yet arisen, but in London they abound. The second botanist in the United States is an active practitioner in St. Louis. One of the foremost comparative anatomists in London sweeps upon the full tide of a metropolitan practice. In our own city we have, or have had, ethnologists, palæontologists, botanists, zoologists, comparative anatomists, of note,—all of them active practitioners. One of our most successful practitioners has clambered up into a very respectable niche in the temple of literary fame. And last, but not least, comes John Darby; all day long torturing men, women, and children, as they bring their facial tumors, their deformed maxillæ, their cancerous tongues, their oral woes of all manner and description, from the North, South, East, and West; and at night, forgetful of his deeds of blood, sitting down to the peaceful conquests of the pen.

Of the various books written by this John the present has, we believe, been the most widely praised, and perhaps will be the most generally liked. In some parts it certainly is deserving of much admiration; but we confess to a prejudice in favor of his first book, "Odd Hours of a Physician." The opening and closing chapters of the volume before us have pleased us most; and we think all husbands—whose name is legion—should read them.

"Concerning a Wife" is not mere words and theory: it has in it much that is the very basis of happiness.

For a book to be taken up at odd times, to look at in the carriage, to read aloud from a few moments before dinner or tea, we heartily commend this. The hours with John Darby will be profitably as well as pleasantly spent.

A COURSE OF PRACTICAL HISTOLOGY. BEING AN INTRODUCTION TO THE USE OF THE MICROSCOPE. By EDWARD ALBERT SCHAEFER. Philadelphia, H. C. Lea, 1877 (reprint).

The title of this book tells what it is about, and in its three hundred small but closely-printed pages is the best epitome of practical histology and the methods of microscopic tissue-study we know of. Full enough for the advanced student, it yet is simple enough for the beginner. The original investigator of course soon gets beyond its limit; but so he does of any but the most encyclopædic treatises: indeed, even these cannot satisfy him. Monographs; original memoirs; rent, riven, twisted, gnarled and knotted, Teutonic polysyllables involved and felted into brain-defying essays,—these are the food such progeny of the gods feed on. The present volume to them is as mother's milk to a man- and heaven-daring son of Anak.

REPORT OF THE FIFTH INTERNATIONAL OPHTHALMOLOGICAL CONGRESS, HELD IN NEW YORK, SEPTEMBER, 1876.

This report of the International Congress of Ophthalmologists forms a volume of two hundred and sixty-five pages. It is composed of the papers read and presented by the members of the Congress, and the discussion had upon each. This, the major part of the book, is prefaced by a table of contents, a list of the members, the rules for the government of the Congress, and a brief report of the general proceedings. The volume is a valuable contribution to ophthalmic literature. The numerous and valuable papers read, and the sharp discussions, speak loudly for the activity of ophthalmic surgeons.

MYELITIS OF THE ANTERIOR HORNS. By E. C. SEGUIN. New York, G. P. Putnam's Sons, 1877.

This is a well-written, very complete monograph of the disease of which it treats as occurring in adults. It contains nothing, so far as we have been able to find, that is new, but represents all that we know about the subject. The only objection we have to offer is the struggle in the author's mind to make the so-called progressive muscular atrophy a separate affection, although he seems to be convinced that it ought not to be still considered as distinct, and although some of the cases reported have been diagnosed at one time as muscular atrophy and at another as myelitis of the anterior horns.

CHART OF THE PHYSIOLOGICAL ACTION OF MEDICINES. By DRS. LOUIS STARR and J. B. WALKER. Philadelphia, J. B. Lippincott & Co., 1877.

This is a brief and correct chart of the sub-

ject of which it treats. Clearly and succinctly stated, its résumé of physiological action may be useful not merely to the student cramming for the greenroom, but also to the practitioner as a key to unlock the difficulties of the more pretentious treatises.

GLEANINGS FROM EXCHANGES.

A NEW CASE OF TENDINOUS SUTURE (*The Medical Record*, February 10, 1877).—M. Duplay recently presented to the Société de Chirurgie, of Paris, a patient, aged 36 years, who, while holding in her hand a number of canes, fell in such a way that her thumb was caught under the canes. The thumb remained flexed on the palm of the hand, and she was utterly unable to extend it. Six weeks later she consulted M. Duplay, and he found that the long extensor of the thumb no longer acted. At the level of the depression between the tendons of the long and short extensor of the thumb, on the outer side of the wrist, he discovered a slight prominence, which appeared to be the upper extremity of the peripheral end of the tendon. The diagnosis of rupture of the tendon being made, he decided to unite the two ends by a suture. The other end of the tendon was found after a long and difficult dissection; but as the distance between the two ends measured from two to two and a half inches, even when the thumb was in a position of extreme extension, he decided to unite the lower end of the tendon with the tendon of the extensor carpi radialis longior. A button-hole opening was made in the latter, and the two tendons united by means of a metallic suture. The patient subsequently suffered from a phlegmon of the back of the hand, but finally made a good recovery, and can now make use of her thumb. The metallic suture did not come away till six weeks after the operation.

M. Tillaux remarked that cases in which anastomosis of tendons is produced are rare, but added that he had performed, in the preceding week, an operation similar to the one performed by M. Duplay.

TREATMENT OF SPASM OF THE GLOTTIS (*The Medical Record*, February 10, 1877).—The attacks of spasm of the glottis are much more violent than those of false croup, being accompanied by contraction of the muscles of respiration, especially of the diaphragm, and sometimes even by general convulsions. In the treatment of this affection there is rarely time to employ the various methods mentioned in the books, such as electricity, frictions, chloroform, etc., and consequently the plan proposed by M. Charon seems to be all the more practical. This physician states that inhalations of ammonia rarely fail to cut short the attack. He advises mothers, who have children subject to attacks of spasm of the glottis, always to carry a bottle of ammonia with them. He cites the case of the wife of a physician, who followed this advice, and whose child always rapidly recovered from the spasm with the help of the ammonia. Unfortunately, one day she did not have her flask with her, and while she was looking for it the child died asphyxiated.

HYDROPHOBIA (*The Lancet*, February 3, 1877).—Dr. Joseph Coats makes the following remarks relative to his examination of the pathological condition in two cases of hydrophobia. The conditions related seem to indicate that there was a more or less persistent irritation in the neighborhood of the scar, presumably caused by the virus introduced by the teeth of the dog. This virus had been absorbed, and the condition of the vessels near the scar, described above, may or may not be connected with this process of absorption. The so-called period of latency is probably the time during which the virus remains local, and the great differences in this period are quite consistent with what we find in other diseases. In local tuberculosis, for instance, the disease may remain local for years, or it may suddenly become generalized, and an acute tuberculosis develop, this being due to the infective material of tubercle finding its way into the general circulation. Just as tuberculosis may remain local, so, probably, may hydrophobia. But when the virus has got into the blood-vessels it will be carried to the various parts of the body. The lesions found in the nervous system in both these cases are evidence of irritation of the blood-vessels, and it is to be presumed that wherever the blood-vessels are delicate they will be similarly irritated and give rise to similar lesions. This general irritation may explain the fever which seems to be always present in hydrophobia. It need not surprise us, supposing a lession of this kind to exist in various organs, that the symptoms are yet mainly referable to the central nervous system. A lesion which will produce almost no effect in the liver might be a very serious one in the central nervous system. So is it, for instance, with tubercles, which may exist in myriads in the liver without any symptoms to speak of, but in the pia mater they produce tubercular meningitis. I have been, therefore, prepared to find lesions analogous to those in the nervous system in other organs, and I find that in the literature of the subject there are references to such lesions. I find, moreover, that in a dog which was killed because of hydrophobia, and which I have not yet fully investigated, there are lesions of a kind similar to those described in other parts as well as in the nervous system. This disease, hydrophobia, may, I think, be contrasted in its pathology with tetanus. In tetanus we have a definite irritation of the nerves connected with the injured part, and in several thoroughly-investigated cases there has been an actual inflammation described.

In hydrophobia the nerves do not seem to be specially involved; for, though there are abnormal sensations in the part, these appear to be rather of the nature of an indefinite stinging or peculiar feeling. In the above case the nerves of the part seemed to present nothing abnormal. Hydrophobia seems, therefore, to be rather an infective disease. The virus is introduced into the skin, and may possibly go no further, producing only irritation there. But getting into the general vascular system, it produces lesions which seem to be immediately related to the blood-vessels. These lesions in the central nervous system seem to be the causes of the peculiar symptoms in this disease.

MISCELLANY.

THE Medical Department of the University of Pennsylvania has greatly increased its teaching facilities by organizing a corps of young teachers who lecture during the spring months. The lecturers and subjects are as follows: Dr. H. Lenox Hodge, *Regional Anatomy*. Dr. C. T. Hunter, *Operative and Minor Surgery*. Dr. De Forrest Willard, *Orthopedic Surgery*. Dr. J. W. White, *Venereal Diseases*. Dr. R. G. Curtin, *Physical Diagnosis*. Dr. C. K. Mills, *Electrical Therapeutics*. Dr. John Guitéras, *Symptomatology*. Dr. D. Bray, *Operative Obstetrics*. Dr. Elliot Richardson, *Practical Obstetrics*. Dr. Louis Starr, *Practical Pharmacy*. Dr. Henry Chapman, *Experimental Physiology*. Dr. S. D. Risley, *Ophthalmoscopy*. Dr. E. O. Shakespeare, *Refraction and Accommodation and Operative Surgery*. Dr. J. H. C. Simes, *Histology*. Besides lectures by these gentlemen there are two daily clinics in the hospital. In the afternoon, lectures by the Auxiliary Faculty. The lectures on Botany, in this faculty, are being given by Prof. J. T. Rothrock, vice H. C. Wood, resigned; and on Hygiene, by Dr. Jos. G. Richardson, vice Prof. H. Hare, temporarily disabled by severe illness.

With all this well-directed activity, it is no wonder that there are more students about the University this spring than ever before at the same season. Instead of the deserted wilderness of the olden time, the building is a busy hive.

During the last year there have been treated at the University Hospital (Medical Department, University of Pennsylvania) 5026 out-patients and 657 in-patients. Of these last a very large proportion have been cases of severe injury, besides many chronic affections requiring operation, so that the surgery of the service is very active. The average cost of each patient per day was $1.43; the total expenses of the hospital being $26,755 70.

IT is reported that the Jefferson College Hospital is to be opened about the 1st of May; but we suspect that not much work will be done there before the autumn. The staff has been organized as follows:

Surgeons.—Drs. John H. Brinton, F. F. Maury, R. J. Levis, S. W. Gross.

Physicians.—Drs. J. Solis Cohen, J. C. Wilson, J. B. Roberts, O. P. Rex.

Ophthalmologist.—Dr. Wm. Thomson.

Pathologist.—Dr. Morris Longstreth.

Gynæcologist.—Dr. Frank Getchell.

THE Twenty-Eighth Annual Session of the Medical Society of the State of Pennsylvania will be held at Harrisburg, Wednesday, June 13, 1877, at 3 P.M.

THE Twenty-Eighth Annual Session of the American Medical Association will be held in the city of Chicago, Ill., on Tuesday, June 5, 1877, in Farwell Hall, at 11 A.M.

A DOUBTFUL COMPLIMENT.—The March number of the *Medical Eclectic* contains a long biographical sketch, with portrait, of Dr. J. Marion Sims.

THE rate of illegitimacy is rather increasing than decreasing in Scotland: in seven counties during the last quarter it exceeded 12 per cent, and in some places reached nearly 18 per cent.

WITH the *New York Medical Record* looking after the country, and the *Philadelphia Medical Times* looking after the *New York Medical Record*, we sleep once more peacefully.—*Louisville Med. News.*

A MUSEUM of Hygiene is to be established in the University of London as a monument to Prof. Parkes. Nearly four thousand dollars have been subscribed.

THE *Philadelphia Medical Times* maintains its standard of excellency.—*London Medical Examiner.*

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM MARCH 25, 1877, TO APRIL 7, 1877, INCLUSIVE.

DE GRAW, C. S., ASSISTANT-SURGEON.—To report to the Commanding Officer, Department of the South, for assignment to duty. S. O. 63, A. G. O., March 24, 1877.

JESSOP, S. S., ASSISTANT-SURGEON.—Assigned to duty at Edgefield, South Carolina. S. O. 64, Department of the South, April 5, 1877.

AZPELL, THOMAS F., ASSISTANT-SURGEON.—Relieved from duty at Fort Columbus, N. Y. H. S. O. 69, A. G. O., April 2, 1877.

MOFFATT, P., ASSISTANT-SURGEON.—Assigned to duty at Fort Foote, Md. S. O. 74, Division of the Atlantic, April 3, 1877.

EWEN, C., ASSISTANT-SURGEON.—Assigned to duty at Madison Barracks (Sackett's Harbor), N. Y. S. O. 70, Division of the Atlantic, March 28, 1877.

PORTER, JOSEPH Y., ASSISTANT-SURGEON.—Granted leave of absence for twenty days. S. O. 61, Department of the South, March 29, 1877.

SHUFELDT, R. W., ASSISTANT-SURGEON.—When command leaves Indianapolis, to proceed to Fort McHenry, Md., complete his unfinished business, and then comply with orders assigning him to duty in Department of the Platte. S. O. 68, Division of the Atlantic, March 26, 1877.

PERLEY, H. O., ASSISTANT-SURGEON.—When command leaves Jeffersonville, to comply with orders assigning him to duty in Department of Dakota. S. O. 68, c. s., Division of the Atlantic.